RESOURCE MANAGEMENT GUIDE

State Forest: Morgan-Monroe Compartment: 06 Tract:08

Forester: D. Potts Date: June 6, 2008

Management Cycle End Year: 2015 Management Cycle Length: 20 years

Location

Sections 2, 3, 10, 11, Township 10N, Range 1E, in Monroe County. The tract is located to the West of Low Gap road and to the North of Orcutt road, about ten miles South East of Martinsville, IN. Private property borders the tract on the south and along one-half of a mile in the North East corner.

General Description

This tract contains 138 acres of which 125 are commercial forestland. The 13 acres not included in commercial forestland are considered too steep for normal harvest operations. The dominant cover type is Mixed-Oak.

History

The tract history management activity record indicates the first activity was a forest inventory in 1976. The next activity indicated was a 1977 harvest of 302 trees with an estimated volume of 72,540 bd. ft., sold to Kenneth Welty of Spencer, IN. In 1981 a total of 520 trees and an estimated volume of 29,309 bd. ft. was sold to Foley Hardwoods of Bargersville, IN. The following year, 1982, a total of 547 trees with an estimated volume of 29,068 bd. ft. were sold to Weston Paper Company of Terre Haute, IN. The two sales in 1981 and 1982 were part of a United States Forest Service (USFS) oak regeneration research study. The USFS released the study area for harvest due to lack of useable plots for the research. Following storm damage in 1990, the area was marked for a salvage harvest. In 1991 a total of 1,364 trees with an estimated volume of 280,761 bd. ft. was sold to Crone Lumber Company of Martinsville, IN. However, some of the trees sold were from Compartment 06 Tract 07. The most recent activity on the tract includes a forest inventory that was completed in March of 2008.

Topography, Geology and Hydrology

This tract is bounded on the northeast and south by property lines. The East boundary is Orcutt Road and the West and Northwest boundaries are drainages. Slopes in this tract are generally in the steep to slightly steep range with slopes ranging from flat to 55-70% slopes.

Soils

Berks-Weikert complex (BkF) 75% of tract, 25-75% slope, harvest limitation due to steep slopes. Wellston Gilpin silt loam (WmC) 25% of tract, 6-20% slope, slight to moderate limitation due to slope and erosion potential.

Access

This particular tract has excellent access off of Orcutt Road. From Orcutt the tract is accessible through the existing haul road that has been used in several previous harvests. The haul road follows the main North to South ridge through most of the tract. Orcutt road can be accessed from Main Forest Road to the North or from Low Gap Road to the South depending on road conditions. The haul road within the tract is in suitable condition for light trucks and vehicles during dry conditions. However, the road will need a substantial amount of gravel before any harvest operation can occur. Existing skid trails will need to be flagged and improved before a harvest.

Boundary

The tract has private property boundaries along one half mile in the NE and along most of the southern border. Some of the property boundaries are marked in orange paint and have recently been repainted. The tract boundaries have not been marked as of yet. The tract boundaries should be marked with flagging before a harvest.

Wildlife

Wildlife resources in this tract are plentiful. This tract supports many woodland species including, but not limited to: White-Tailed Deer, Wild Turkey, Eastern Grey Squirrel, Fox Squirrel, chipmunks, and various songbirds. The tract contains one very small pond that supports many reptiles and amphibians, no fish. A tract Wildlife Review was completed following the most recent forest inventory in March, 2008.

Communities

Butternut (*Juglans cinerea*) was identified within the tract during the recent Forest Inventory. The Natural Heritage Database does not indicate any species or communities of concern within the tract boundary. However, the Natural Heritage Database indicates that Bobcat (*Lynx rufus*), Timber Rattlesnake (*Crotalus horridus*), Kirtland's Snake (*Clonophis kirtlandii*), Butternut, Hooded Warbler, Worm-eating Warbler, Cerulean Warbler, and Illinois Blackberry (*Rubus centralis*) are present or have been discovered in adjacent or nearby tracts.

Exotics

Exotic species noted within this tract are Multiflora Rose (*Rosa multiflora*) and Autumn Olive (*Elaeagnus umbellate*). Both of these species are found at the entrance of the tract off of Orcutt Road in the area that is to be a log yard. Treatment is prior to harvest operations

Recreation

This tract has many possibilities for recreation uses. Some of the more common recreation that can be expected within the tract and surrounding area include: jogging, hunting, hiking, birding, traversing (with a compass and map), wildlife watching, meditation, mushroom hunting, and tree identification.

Cultural

There are no cultural resources that have been identified at this time. If during timber marking one is discovered the location would be protected. Adverse impacts to significant cultural resources will be avoided during any management or construction projects, should they be discovered.

Tract Subdivision Description and Silvicultural Prescription

Forest Condition

This tract has been selected as a potential harvest area for 2008/2009 fiscal year. The primary volume comes from BLO (920 Bd Ft/Ac), SCO (330 Bd Ft/Ac.), and YEP (690 Bd Ft/Ac). Sawtimber Leave volume is 3,660 bd ft/acre and Sawtimber Harvest volume is 3,730 bd ft/acre. The volume harvestable was estimated overall as high enough to hold a large sized timber sale.

The tract was estimated to be at 82% stocking with an annual growth rate of 115 Bd Ft/Ac/Yr. Given this information, this tract is adequately stocked and could benefit from a selective cut harvest.

Timber Stand Improvement (TSI) is needed on steep slopes where regeneration is extremely dense.

Mature to over-mature yellow poplar trees will be removed to release intermediate and valuable trees such as White oak and Shagbark hickory. Regeneration openings of one to five acres will be marked to provide wildlife habitat and regeneration of surrounding species. Overall tree quality is fair on all slopes.

Harvesting that is planned should concentrate on intermediate cutting to remove mature and overmature individuals (Selection thin) as well as lower quality, low vigor, and poorly formed trees (Improvement cutting).

In accordance with Indiana Bat Guidelines, this tract meets residual stand requirements regarding roost and nesting trees. Indiana Bat Guidelines calls for at least 3 trees/Acre 20+ inches in diameter and 6 trees/Acre11"+ in diameter be left on site after harvest. This tract will retain 4 trees/Acre 20"+ in diameter and 17 trees/Acre11+ inches in diameter.

See attached map

Area A Subdivision classification: Mixed Oak

The majority of this tract is contained within the Mixed Oak subdivision. This area includes ridge tops as well as moderates to steep slopes. There are several areas where the stocking is low due to a USFS research study that occurred in the late 1970's and early 1980's. The study title was "The Effect of Overstory and Understory Density on Establishment and Growth of Oak Advance Reproduction". This area contains many oaks that are at or near maturity and are starting to decline. The data collected from the recent inventory indicate that the stand is possible of facilitating a selective cut harvest.

Area B Subdivision classification: Storm damage regeneration area
The dominant species composition of this area is a mixture of YEP, OAK, and
HIC. This area is a small portion of the tract that is the result from a series of strong to

severe storms that occurred in 1991. Most of the overstory was removed as part of a salvage harvest. Based on the current conditions and the inventory data limited harvesting is recommended within this area. However, crop tree release TSI should be performed in the near future.

Area C Subdivision classification: Yellow Poplar

This area contains many large YEP that are at or nearing maturity and are starting to show signs of decline. There is a section of this area that would benefit from a regeneration opening of up to five acres. This section contains many large YEP with little to no regeneration in the understory. Regeneration expected to remain as WHA/BLC/YEP.

Area D Subdivision Classification: Bottomland hardwoods

Much of this area is adjacent to Low Gap Road. This area is prone to periodic flooding especially during periods of heavy rainfall. This area contains a diverse mixture of dominant and co-dominant hardwood species. At this time no harvest activity is recommended due to problems with access.

Area E Subdivision classification: Severe slope

This area includes about 13 acres of severely sloped forestland. Harvest activities will be limited in this area due to higher potential for soil loss and possible impact to water quality.

Proposed Activities Listing

Timber Marking FY 08-09 Sale Harvest planned FY 09-10 Post-Harvest TSI FY 09-10

Attachments (On file in Property Office)

- -A topo map of the tract.
- -A map showing the soil types in the tract.
- -A stocking guide chart.
- -HDR map
- -Timber Type Map

To submit a comment on this document, click on the following link: http://www.in.gov/surveytool/public/survey.php?name=dnr forestry

You **must** indicate "Morgan-Monroe C 08 T 08" in the "Subject or file reference" line to ensure that your comment receives appropriate consideration. Comments received within 30 days of posting will be considered.

Morgan-Monroe State Forest Comp 06 Tract 08

